

## WHAT IS CLAIMED IS:

 A video encoding method with support for editing when scene changed, the distance between two reference pictures being defined as M in a GOP, the method comprising the steps of:

capturing pictures in a display order;

detecting the scene change for a picture PIC<sub>n</sub>; and

coding the pictures in a coding order when there is not a scene change occurred, and coding the pictures by a special processing when there is a scene change occurred;

the special processing comprising:

executing a first and a third coding stages when the picture PIC<sub>n-1</sub> is not a reference picture; and

executing a second and the third coding stages when the picture PIC<sub>n-1</sub> is a reference picture;

- wherein the first coding stage is to re-code the picture  $PIC_{n-1}$  as a P-picture, the second coding stage is to code the B-pictures preceding the picture  $PIC_{n-1}$ , and the third coding stage is to start a new GOP, to code a picture  $PIC_{n+M-1}$  as a I-picture, and to code the pictures  $PIC_n$  to  $PIC_{n+M-2}$  as B-pictures with only referencing to the picture  $PIC_{n+M-1}$ .
- 2. The video encoding method of claim 1, wherein the first coding stage finishes coding the B-pictures if there are B-pictures preceding a previous reference picture.
- 3. The video encoding method of claim 1, wherein the first coding stage codes the B-pictures if there are B-pictures preceding the picture PIC<sub>n-1</sub>.